DOCUMENT RESUME

ED 049 335 UD 011 431

AUTHOR	Nagler, Sylvain; Hoffnung, Robert
TITLE	Teacher Expectations, Children's Perceived Powerfulness and School Performance.
INSTITUTION	Yale Univ., New Haven, Conn. Dept. of Psychiatry.
PUB DATE	Mar 71
NOTE	25p.; Prepared for presentation at the 48th Annual Meeting of the American Orthopsychiatric Association, Washington, D.C., March 21-24, 1971
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	*Academic Achievement, Caucasian Students, *Performance Factors, Primary Grades, Psychological Studies, *Self Concept, Student Behavior, *Student Teacher Relationship, Success Factors, *Teacher Attitudes

ABSTRACT

The Children's Perceived Powerfulness Scale (CPPS) was administered to 1200 suburban elementary grade school children. At each of four grade levels, three classes were designated as High Powerful (HP) and three as Low Powerful (LP). Results indicate that children in HP classes were viewed more favorably by their teachers, obtained higher scores on standardized tests, and were judged to have fewer behavioral problems than children in LP classes. The results are discussed in terms of the characteristics of classroom structure and teacher roles which may facilitate or inhibit feelings of powerfulness and, consequently, school performance of elementary school children. (Author/DM)

TEACHER EXPECTATIONS, CHILDREN'S PERCEIVED POWERFULNESS AND SCHOOL PERFORMANCE

Sylvain Nagler, Ph.D.
and
Robert Hoffnung, Ph.D.

Yale University School of Medicine
Department of Psychiatry
New Haven, Conn. 06519

Prepared for presentation at the 48th Annual Meeting
American Orthopsychiatric Association, March, 1971.
Washington, D.C.

ABSTRACT

Teacher Expectations, Children's Perceived Powerfulness and School Performance*

Sylvain Nagler
and
Robert Hoffnung

The Children's Perceived Powerfulness Scale (CPPS) was administered to 1200 suburban elementary school children in Grades I to IV. At each of the four grade levels, three classes were designated as High Powerful (HP) and three as Low Powerful (LP). Results indicate that children in HP classes were viewed more favorably by their teachers, obtained significantly higher scores on standardized achievement tests, and were judged to have fewer behavioral problems than children in LP classes. The results are discussed in terms of characteristics of classroom structure and teacher roles which may act to facilitate or inhibit feelings of powerfulness and, consequently, school performance among elementary school children.

* Paper presented at the 48th. Annual Meeting of the American Orthopsychiatric Association, March, 1971, Washington, D.C.

The concepts of the self-fulfilling prophecy and perceived powerfulness to control the environment are gaining increased attention as experimental variables in educational research. This trend received considerable impetus from two widely publicized research projects completed within the past few years: Pygmalion In The Classroom by Rosenthal and Jacobson[20] and Equality of Educational Opportunity, more commonly known as the Coleman Report[8].

Rosenthal and Jacobson[20] studied the impact of teachers' expectations of their students and found that those children who were presumed by their teachers to be potential academic spurters, in fact, demonstrated significant improvement on a test of intellectual ability as well as receiving positive ratings by their teachers. Coleman, et al[8], having access to a very large, nation-wide sample of students, found a significant relationship between students' perceived control of the environment and their academic achievement, those who felt in control of their environment obtaining higher achievement test scores.

However, neither Coleman or other researchers investigating children's powerfulness have included in their samples students enrolled in grades I and II. As a result there is an absence of reported data about the child's earliest experiences of environmental control in school. Furthermore, although both teacher expectations and children's perceived powerfulness have been shown to play a role in school success, there is no published report describing an attempt to investigate the inter-

relationship between the two.

Establishing a relationship between these two variables would lend support to strategies for educational change which are aimed at enhancing feelings of powerfulness in students by elevating teacher expectations of them. This would not imply that teacher expectations represent the only influence, for, in fact, children's perceptions of their environmental control are predicated on many experiences. However, we propose that the way a teacher feels about the ability of children to make decisions for themselves determines, to a significant extent, how the learning experience in the classroom will be structured for those children. This structure, in turn, is reflected in how students feel about their ability to control what happens to them in school, i.e., how powerful they feel.

The present study was designed to examine the relationship between teacher perceptions and children's feelings of powerfulness. Subsequent studies are planned to investigate the relationship between the structure of the classroom (e.g., "Open" vs. "Traditional")and children powerfulness and school success.

Perceived control of the environment and the concept of powerlessness. Seeman[27] has defined powerlessness as the expectancy or probability held by the individual that his own behavior cannot determine the occurence of the outcome or reinforcements which he seeks. Rotter's construct of locus of control, which has its basis in social learning theory[21,22,23], very much resembles Seeman's definition in that it, too, focuses on the individual's characteristic way of perceiving his role in

determining events which confront him.[24] To measure a person's beliefs about locus of control, Rotter developed the I-E Scale, which remains the most widely used instrument to measure this phenomenon. Both Seeman and Rotter have conducted studies using this construct as an independent variable, e.g., Rotter,[24] Seeman.[28,29]

The general concept of powerlessness and control of one's environment has not been confined in use to experimental psychology and sociology. For example, it was considered to be an important explanatory concept in an early anti-poverty program--Harlem Youth Opportunities Unlimited, Inc. Indeed, the project's summary report was entitled Youth In The Ghetto: A Study of the Consequences of Powerlessness.[14]

Scales for measuring perceived powerfulness in children. Both Seeman's concept of powerlessness and Rotter's concept of locus of control are applicable for studying adult beliefs. However, scales have also been derived for use with children.[1,3,9,13] The Crandall, et al[9] Intellectual Academic Responsibility scale, (IAR), is different from the others in that it focuses on school related events only. "It being aimed at assessing children's beliefs in reinforcement responsibility exclusively in intellectual-academic situations."[10]

Using the IAR scale to differentiate between high and low internality (powerful) children, several investigators have reported superior school performance for high internality boys.[5,6,11,12] However, these samples did not include children in grades I and II.

The Coleman project, previously cited, sampled large numbers of students in grades VI, IX and XII. Control of environment was

inferred from responses to the following three questions: "Good luck is more important than hard work for success. Everytime I try to get ahead, something or someone stops me. People like me don't have much of a chance to be successful in life." The results of the survey indicated a clear relationship between students' perceived control of the environment and their academic achievement. The intensity of the relationship varied, depending on such factors as race, grade level, racial composition of the classroom and parental desires for the child's further education.

Limitations of existing perceived powerfulness scales for children. The Coleman questions focus on general environemntal situations and not specifically on the child's perception about school events. While the IAR does deal exclusively with school related instances, it was standardized on a population of children in grade III and up and, therefore, seems to be both too lengthy and too difficult for younger children.

Teacher perceptions and expectations and the self-fulfilling prophecy. Merton[17] has defined the self-fulfilling prophecy as "in the beginning, a false definition of the situation evoking a behavior which makes the originally false conception come true." This phenomenon has gained increased attention in the areas of experimental psychology and psychoeducational research largely through the work of Robert Rosenthal.[19] The typical paradigm used by Rosenthal and others working in the area is leading half the experimenters in the study to expect certain responses from their subjects and the other half of the experimenters to expect a different and opposite response. The findings indicate that

the subjects manage to end up behaving in the way the experimenters believed they would, independent of the direction of the experimenters' expectations.

Some critics of contemporary educational practices have argued that the self-fulfilling prophecy is responsible, to a great extent, for the inferior performance of black and poor children in the schools, e.g., Clark,[7] Deutsch.[12] In fact, the HARYOU Report singled out low teacher expectations as the primary cause for underachievement in the Harlem schools. "The major reason why an increasing number of Central Harlem pupils fall below their grade level is that substandard (italics in original) performance is expected of them."[15]

Taking note of these findings and points of view, the present study was undertaken to explore the relationship between children's perceived powerfulness, teacher expectations and students's academic achievement and general school success.

METHOD

Subjects. An exhaustive sample of all students and teachers in grades I-IV in a suburban school system served as subjects. Each grade level consisted of between 11 and 13 classes, with each class containing approximately 25 students. At each of the four grade levels, three classes were designated as high powerful (HP) and three classes as low powerful (LP), based on the classes' mean score on the Children's Perceived Powerfulness Scale (CPPS). This yielded a total experimental sample of 24 classes, 12 HP and 12 LP.

The decision to use classroom rather than individual student

performance reflects a commitment to focus experiemntal investigations, as much as possible, on the social conditions which may cause a given behavior rather than on the individual products of those conditions. In the present study, the social conditions are the classroom structure and atmosphere which contribute to making children in some classrooms feel better able than children in others to control what happens to them in school. The presence or absence of such factors was inferred from the average class score on the CPPS and no data were collected regarding specific ways in which high powerful classes were produced.

Children's Perceived Powerfulness Scale (CPPS). Initially, a pool of 24 stories depicting some school situations was generated. Each story had two outcomes or endings. The stories were modeled after those contained in previously published instruments, e.g., Crandall, et al,[9] and derived from consultations with school personnel. For each story, one of the two endings indicated that the outcome was contingent on or under the control of the child's action, while the second ending indicated that the outcome was contingent on or under the control of the teacher's action or chance. Those items which had no less than 30% and no more than 70% endorsement of either alternative ending at each grade level were chosen for the final scale. This criterion yielded three items. As it turned out, all three of these items depict school situations having unsuccessful outcomes, i.e., alternatives where the child is not successful in achieving his or her goal. This fact may limit the generalizability of the scale. The three items are:

1. Let's pretend that one day your teacher asked all the children in the class to draw a picture. After all the children finished, the teacher did not hang your picture on the bulletin board. Was it because it was not your turn or because you did not do a good job? If it was because it was not your turn, make an X in the circle, if it was because you did not do a good job, make an X in the square.

2. Let's pretend that one day your teacher read a story to the class. After she finished reading the story, the teacher asked the children in the class: Who remembers the name of the story? You did not remember the name. Did you not remember because you did not listen carefully or because the teacher read the story too quickly? If it was because....

3. Let's pretend that one day your teacher gave all the children in the class a puzzle to do. You did not finish the puzzle. Was it because the puzzle was not easy enough or because you did not work hard enough? If it was because....

In addition, one item used by Coleman[8] was administered: "Yes or No, good luck is more important than hard work for doing well."

Teacher perceptions and expectations. Using a five point scale (1 indicating the most positive and 5 indicating the most negative), teachers rated students in their classroom on the following characteristics: estimated intelligence, probability of completing high school, ability to go to college, probability of attending college and the influence of the family on the student's attitude about education and performance in school.

Children's Behavior Checklist (CBCL). A questionnaire developed by Rutter[25] consisting of 26 descriptions of problem behavior which can be observed in the classroom was completed by each teacher for the children in her class. Teachers indicated whether each behavior pattern described: "certainly applies" (score of 0), "applies somewhat" (score of 1) and "does not apply" (score of 2).

Students' Achievement. Reading and arithmetic percentile scores were obtained from the the Metropolitan Achievement Tests administered by the school system in May of each year and were used as a measure of academic performance. All other data were also gathered during the month of May.

RESULTS

Preliminary analyses for boys and girls separately failed to reveal any significant differences in perceived powerfulness between the two (Boy mean = 0.47, Girl mean = 0.54). While girls in the present study were rated by their teachers as having significantly fewer behavior problems and achieved higher on the reading test, in light of the absence of differences in perceived powerfulness between boys and girls and the absence of powerfulness x sex interactions, girls and boys were grouped together in the subsequent statistical analyses.

At each of the four grade levels, the three classrooms with the highest and lowest mean scores on the CPPS were designated HP and LP groups, respectively. Table 1 presents the mean CPPS scores for HP and LP groups at each grade level.

Table 1 about here

At each grade level the differences between HP and LP classes were significant. Powerfulness scores decreased significantly from Grade I to IV.

With HP and LP classes constituting the independent variable, two way analyses of variance were computed to compare these two groups over the four grade levels on each of the dependent measures. The means of HP and LP classes and a summary of the these analyses are presented in Table 2.

Table 2 about here

At each grade level, comparisons were also made between HP and LP classes. The means and t-test results are summarized in Table 3.

Table 3 about here

Achievement scores. Children in HP classes obtained significantly higher achievement test scores on both Reading and Arithmetic than did children in LP classes. The superiority of the HP classes in reading was most striking for grades IV and II, less so in grade I and absent in grade III Reading percentile scores decreased by grade and no powerfulness x grade interaction was found.

On Arithmetic achievement tests, HP classes in grade IV achieved 25 percentile points higher than their LP counterparts, but smaller differences were found in grades I and III and a slight reversal of HP superiority was found in grade II. The differences in magnitude between grades account for the significant power x grade interaction. As in the case of reading, there was a general decline in scores over grades on the Arithmetic test.

Teacher perceptions and expectations. High powerful classes were perceived by their teachers as being significantly brighter than low powerful classes, despite the fact that overall no significant differences in actually tested IQ were found. (Significant difference between HP and LP classes were found for Grade III). Students in HP classes were also viewed as being more likely to complete high school than were students in LP classes. These differences were found at all grade levels, except grade III. No overall HP-LP differences occured for teacher teacher evaluations of ability to go to college or for the probability of attending college. In terms of teachers' evaluations of the influence of the students' families, overall, families of students in HP classes were perceived more favorably than families of students in LP classes. This was true at each grade level, except, again, grade III.

An analysis of the sum of the teacher perceptions and expectations revealed that the teachers of HP classes judged their students more positively than teachers of LP classes. The power x grade interaction reflects a slight reversal for grade III and the strong superiority of HP classes in grade IV.

Teacher ratings of classroom behavior. Teachers of HP classes rated their students as having significantly fewer problems than teachers of LP classes, as measured by the sum of CBCL items. The power x grade interaction reflects a reversal of HP superiority for grade III.

The analysis of individual items indicates that with the exception of grade III, students in HP classes were less likely to be seen as: restless (item # 1), squirmy and fidgety (item #3), frequently fighting with other children (item #5), being worried about many things (item #7), often sucking thumb or finger (item #12), biting nails or fingers (item #13), often being disobedient (item #15), having poor concentration or short attention span (item #16), being fearful of new things or situations (item #17) and bullying other children (item #26).

Although there was a significant difference between grades on the CBCL and the power x grade interaction was also significant, no apparent systematic trends were found.

To summarize the results, children in HP classes obtained higher scores on standardized achievement tests in Reading and Arithmetic, were viewed more favorably by their teachers and were judged to have fewer classroom behavior problems. No overall significant differences were found for attendance, the Coleman item and the SES of the family.

DISCUSSION

The superior performance on the Reading and Arithmetic achievement tests of HP classes replicate findings of previous investigations.[5,6,11,16] However, the present study indicates that the relationship between perceived powerfulness and achievement also holds true when children in grades I and II are included in the experimental sample. This suggests that intervention programs aimed at altering the conditions which contribute to children's perceived powerlessness cannot come too soon in the child's school history. Furthermore, the fact that these findings are based on a sample of white, predominantly middle class, suburban students indicates that it is not only the poor and black student who is adversely affected by feelings of powerlessness in school.

The fact that HP classes were also viewed more favorably by their teachers than LP classes raises the question about the impact such teacher feelings have on the development of perceived powerfulness and powerlessness. A critical issue, then, is the directionality of the relationship between teacher perceptions of their students and the students' feelings of powerfulness. Neither the findings of this study or those of previous ones allow us to answer the question directly. However, there are several studies which demonstrate that teachers' expectations, in fact, influence how students respond and perform in the classroom. Rosenthal and Jacobson's[20] study indicated that favorable teacher expectations led to improved performance by students on a test of intellectual skills. Although this study makes a valuable contribution, it was not designed to

investigate the process by which such expectations actually lead to changes in the students' behavior.

However, three more recently published studies specifically address themselves to this issue. Beez[2], using differential interpretations of psychological reports as the means to manipulate teacher expectations, found that "Teachers who had been given favorable expectations about a pupil tried to teach more symbols than did the teachers given unfavorable expectations. The difference in teaching effort was dramatic. Eight or more symbols were taught by 87% of the teachers expecting better performance, but only 13% of the teachers expecting poorer performance tried to teach that many words." Thus, one way teacher expectations get implemented is by presenting more material to those students expected to succeed and thereby increasing their opportunity to learn.

Brophy and Good[4] found that teachers demanded better performance from those children for whom they had higher expectations and were more likely to praise such performance when it was elicited. In contrast, the teachers were more likely to accept poor performance from students for whom they held low expectations and were less likely to praise good performance from them. Thus, another way teachers implement their expectations is through differential reinforcement of student behavior, rewarding students from whom success is expected more frequently than students from whom it is not expected.

Finally, Rist[18] studied a group of black, ghetto children and found that the "development of expectations by the kindergarten teacher as to differential academic potential and capability of any student was significantly determined by a series of subjectively

interpreted attributes and characteristics of that student" (p. 413). Based on these evaluations, children were assigned to groups expected to succeed--called fast learners-- and groups anticipated to fail--called slow learners. "Differential treatment was accorded the two groups in the classroom, with the group designated as 'fast learners' receiving the majority of the teaching time, rewa:d directed behavior and attention from the teacher" (p. 414). Thus, a third way expectations get implemented is by grouping or tracking students.

The results of the present study indicate a relationship between perceived powerfulness and achievement and between perceived powerfulness and teacher expectations. This suggests that perceived powerfulness may prove to be a useful link in bridging the gap between teachers' feelings about their students and the students' performance in school.

For example, the roles assumed by the teachers in the Beez[2] and Rist[26] studies deprived the students in their "classes" of assuming any active role in determining what happened to them, for the teachers permitted their initial expectation to dominate the nature of the interaction with the particular child. Furthermore, many of the behavior patterns described by Brophy and Good[4] may be classified as indices of powerfulness, in that they represent ways in which children can exercise control of the learning situation. For example, one would predict that high powerful children would initiate more learning interactions such as hand raising and calling out answers, behaviors which were singled out by the experimenters as depicting students' who were perceived more favorably by their teachers.

The finding that children in LP classes are judged by their teachers as having a greater number of problems than

students in HP classes supports the interpretation that children who feel they cannot control events which happen to them in the classroom express their frustration in ways which are viewed by their teachers as problems. HP classes, on the other hand, permit the students to exercise more personal control over what happens to them and, therefore, the children are not forced to resort to so-called symptomatic behavior to express their needs.

A major implication of this study is that children's sense of powerfulness is a critical departure point for intervening to help schools provide a more conducive environment for learning to take place. More specifically, the results of the study suggest that programs should concentrate their efforts on enhancing conditions which maximize children's feelings of powerfulness and work toward eliminating those conditions which maximize feelings of powerlessness. Such programs, focusing on social conditions, would be consistent with a strategy proposed by William Ryan in his book, Blaming the Victim[26]. Ryan advocates that social problems can be ameliorated more readily by changing the causal conditions that create the problem in individuals, rather than trying to change the persons who suffer from or are victimized by these conditions.

Thus, strategies aimed at helping children gain more power in the classroom must focus more on changing the classroom structure and teaching roles and less on changing the individual child in order to make him or her accommodate to existing conditions. The British Infant Schools, the Open Classroom and the Free School Movement all represent attempts to create models in which students are able to assume a more active and equitable role in the learning

process.

The present study is being pursued longitudinally in order to investigate the extent to which children's perceived powerfulness remains constant or is affected by placement in a different classroom and with a different teacher. At the same time, the extent to which teachers tend to evoke similar levels of perceived powerfulness from year to year and with different classrooms of children will be investigated.

References

1. Battle, E.S. & Rotter, J.B. Children's feelings of personal control as related to social class and ethnic group. Journal of Personality, 1963, 31, 482-490.

2. Beez, V.W. Influence of biased psychological reports on teacher behavior and pupil performance. Proceedings, 76th Annual Convention, American Psychological Association, 1968, 605-606.

3. Bialer, I. Conceptualization of success and failure in mentally retarded and normal children. Journal of Personality, 1961, 29, 303-320.

4. Brophy, J. E. & Good T. L. Teachers' communication of differential expectations for children's classroom performance: some behavioral data. Journal of Educational Psychology, 1970, 61, 365-374.

5. Cellura, A. E. Internality as a determinant of academic achievement in low SES adolescents. Unpublished manuscript, University of Rochester, 1963. (Quoted in #16)

6. Chance, J. E. Internal control of reinforcement and the school learning process. Paper given at the Society for Research in Child Development, Minneapolis, Minn., 1965. (Quoted in #16)

7. Clark, K. Dark ghetto. New York: Torchbooks, 1967

8. Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfeld, F. D., & York, R. L. Equality of educational opportunity. Washington, D.C.: U.S. Government Printing Office, 1966.

9. Crandall, V. C., Katovsky, W. & Crandall, V. J. Children's beliefs in their own control of reinforcements in intellectual-academic achievement situations. Child Development, 1965, 36, 91-109.

10. ibid. p. 93

11. Crandall, V. J., Katovsky, W., & Preston, A. Motivational and ability determinants in young children's intellectual achievement situations. Child Development, 1962, 33, 643-661.

12. Deutsch, M. Some psychosocial aspects of learning in the disadvantaged. In Torrance, E. P. and Strom, R. D. (Eds.) Mental health and achievement, increasing potential and reducing school drop-outs. New York: John Wiley, 1965

13. Gozali, J. & Bialer, I. Children's locus of control scale: independence from response set bias among retardates. American Journal of Mental Deficiency, 1968, 72, 622-625.

14. Harlem Youth Opportunities Unlimited, Inc. Youth in the ghetto: a study of the consequences of powerlessness. New York: HARYOU, 1964.

15. ibid. p. 237

16. McGhee, P. E. & Crandall, V. C. Beliefs in internal-external control of reinforcements and academic performance. Child Development, 1968, 39, 91-102.

17. Merton, R. K. Social theory and social structure. New York: The Free Press, 1957.

18. Rist, R. C. Student social class and teacher expectations: the self-fulfilling prophecy in ghetto education. Harvard Educational Review, 1970, 40, 411-451.

19. Rosenthal, R. Experimenter effects in behavioral research. New York: Appleton, 1966.

20. Rosenthal, R. & Jacobson, L. Pygmalion in the classroom: teacher expectations and pupil intellectual development. New York: Holt, Rhinehart & Winston, 1968.

21. Rotter J. B. Social learning and clinical psychology. New York: Prentice-Hall, 1954.

22. Rotter, J. B. The role of the psychological situation in determining the direction of human behavior. In M. R. Jones (Ed.) Nebraska symposium on motivation. Lincoln: University of Nebraska Press, 1955.

23. Rotter, J. B. Some implications of social learning theory for the prediction of goal directed behavior from testing procedures. Psychological Review, 1960, 67, 301-316.

24. Rotter, J. B. Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 1966, 80, Whole No. 609.

25. Rutter, M. A children's behaviour questionnaire for completion by teachers: preliminary findings. Journal of Child Psychology and Psychiatry, 1967, 8, 1-11.

26. Ryan, W. Blaming the victim. New York: Pantheon, 1970.

27. Seeman, M. On the meaning of alienation. American Sociological Review, 1959, 24, 783-791.

28. Seeman, M. Alienation and social learning in a reformatory. American Journal of Sociology, 1963, 69, 270-284.

29. Seeman, M. Alienation, membership and political knowledge: a comparative study. Public Opinion Quarterly, 1966, 30, 359-367.

Table 1. Powerfulness Scores of High and Low Classes

ANALYSIS OF VARIANCE

	F	df	p <
Powerfulness (High-Low Classes)	62.75	1/537	.001
Grade Level (I-IV)	20.49	3/537	.001
Powerfulness X Grade Level	3.80	3/537	.01

t-TEST COMPARISONS

	Mean HP Classes	Mean LP Classes	t	df	p <
Grade I	1.71	2.06	2.25	134	.05
Grade II	1.47	1.85	2.38	142	.02
Grade III	0.97	1.94	6.65	141	.001
Grade IV	0.67	1.44	4.79	120	.001

Table 2. Summary of Analyses of Variance of School Success of High and Low Powerful Classes in Grades I-IV

	Powerfulness (High-Low) $\bar{X}$ HP	$\bar{X}$ LP	p	Grade Level (I-IV) p	Grade X Power p
Teacher Perceptions and Expectations					
1. Estimated intelligence	2.58	2.71	.05	n.s.	n.s.
2. Probability complete HS	1.24	1.45	.005	n.s.	.05
3. Ability to go to college	2.29	2.39	n.s.	n.s.	.005
4. Probability will go to college	2.47	2.55	n.s.	n.s.	.005
5. Family influence	1.67	1.81	.05	.005	.005
Sum	10.14	10.87	.01	n.s.	.005
Classroom Behavior Checklist					
1. Very restless	0.23	0.52	.005	.05	.01
2. Truants from school	0.09	0.01	n.s.	n.s.	n.s.
3. squirmy, fidgety child	0.26	0.44	.005	.005	.005
4. Often destroys belongings	0.07	0.11	n.s.	.005	.005
5. Frequently fights	0.13	0.20	n.s.	n.s.	.005
6. Not much liked by children	0.12	0.09	n.s.	.005	.005
7. Often worried	0.16	0.36	.005	.05	n.s.
8. Rather solitary	0.12	0.16	n.s.	n.s.	.005
9. Irritable	0.10	0.15	n.s.	n.s.	.05
10. Often unhappy or distressed	0.09	0.14	n.s.	n.s.	n.s.
11. Has twitches or tics	0.02	0.02	n.s.	n.s.	n.s.
12. Sucks thumb	0.01	0.02	.05	n.s.	n.s.
13. Bites nails	0.03	0.08	.05	n.s.	n.s.
14. Tends to be absent from school	0.06	0.04	n.s.	n.s.	n.s.
15. Is often disobedient	0.10	0.19	.05	n.s.	.01
16. Poor concentration	0.31	0.53	.005	.005	n.s.
17. Fearful of new things	0.21	0.31	.05	.005	.005
18. Fussy or overparticular child	0.07	0.11	n.s.	n.s.	.01
19. Often tells lies	0.06	0.08	n.s.	n.s.	.005
20. Has stolen things	0.03	0.06	n.s.	n.s.	.05
21. Tears on arrival at school	0.03	0.05	n.s.	n.s.	n.s.
22. Has wet or soiled self	0.00	0.01	n.s.	n.s.	n.s.
23. Often complains of pains	0.09	0.11	n.s.	n.s.	n.s.
24. Has a stutter or stammer	0.01	0.04	n.s.	n.s.	n.s.
25. Has other speech difficulty	0.07	0.08	n.s.	n.s.	.005
26. Bullies other children	0.09	0.15	n.s.	n.s.	.005
Sum	2.47	4.06	.005	.005	.005
Group IQ Score	110	110	n.s.	n.s.	n.s.
Achievement Test Scores					
Reading	63.8	57.8	.01	.005	n.s.
Arithmetic	77.4	69.4	.005	.005	.005
Estimated SES of Family	3.16	2.97	n.s.	.05	n.s.
School Attendance	171.47	171.66			
Human Item	0.26	0.31			

Table 3. Mean and t-test Comparisons of School Success Between High and Low Powerful Classes At Each Grade Level

	Grade I		Grade II		Grade III		Grad
	$\bar{X}$ HP	$\bar{X}$ LP	$\bar{X}$ HP	$\bar{X}$ LP	$\bar{X}$ HP	$\bar{X}$ LP	$\bar{X}$ HP
Teacher Perceptions and Expectations	n=69	n=67	n=76	n=68	n=74	n=71	n=55
1. Estimated intelligence	2.48	2.57	2.70	2.71	2.66	2.73	2.42
2. Probability complete HS	1.17	1.54	1.18	1.46c	1.42	1.39	1.16
3. Ability go to college	2.46	2.22c	2.40	2.09	2.24	2.38	2.02
4. Probability go to college	2.58	2.33	2.50	2.39	2.62	2.55	2.09
5. Family influence	1.35	1.96c	1.51	1.78c	1.18	1.76c	1.62
Sum of Expectations	10.01	10.58	10.17	10.46	11.11	10.80	8.984
Classroom Behavior Checklist							
1. Very restless	0.29	0.67c	0.07	0.45c	0.46	0.42	0.07
2. Truants from school	0.01	0.03	0.01	0.00	0.00	0.00	0.02
3. Squirmy, fidgety child	0.29	0.58c	0.09	0.39c	0.54	0.35	0.07
4. Often destroys belongings	0.00	0.30c	0.01	0.01	0.22	0.03b	0.02
5. Frequently fights	0.09	0.30a	0.05	0.20a	0.28	0.10a	0.09
6. Not much liked by children	0.12	0.10	0.01	0.06	0.30	0.09b	0.06
7. Often worried	0.32	0.40	0.04	0.36c	0.16	0.28	0.11
8. Rather solitary	0.16	0.10	0.04	0.28c	0.24	0.06c	0.04
9. Irritable	0.07	0.12	0.04	0.16a	0.20	0.07	0.11
10. Often unhappy or distressed	0.15	0.12	0.03	0.09	0.11	0.18	0.07
11. Has twitches or tics	0.03	0.09	0.01	0.04	0.05	0.01	0.00
12. Sucks thumb	0.00	0.09	0.01	0.07	0.04	0.03	0.00
13. Bites nails	0.04	0.06	0.00	0.06a	0.08	0.09	0.00
14. Tends to be absent from school	0.07	0.02	0.04	0.06	0.11	0.04	0.02
15. Is often disobedient	0.07	0.28a	0.04	0.20b	0.24	0.11	0.06
16. Poor concentration	0.51	0.66	0.16	0.42c	0.37	0.49	0.18
17. Fearful of new things	0.49	0.33	0.08	0.29c	0.18	0.21	0.09
18. Fussy or over-particular	0.10	0.05	0.08	0.07	0.05	0.09	0.06
19. Often tells lies	0.01	0.18b	0.03	0.06	0.15	0.04	0.04
20. Has stolen things	0.00	0.15a	0.03	0.04	0.08	0.04	0.02
21. Tears on arrival at school	0.09	0.08	0.00	0.03	0.03	0.03	0.02
22. Has wet or soiled self	0.01	0.03	0.00	0.00	0.00	0.01	0.00
23. Often complains of pains	0.10	0.10	0.04	0.09	0.11	0.07	0.11
24. Has a stutter or stammer	0.00	0.05	0.01	0.00	0.04	0.03	0.00
25. Has other speech difficulty	0.00	0.19	0.07	0.06	0.14	0.03	0.04
26. Bullies other children	0.03	0.30c	0.03	0.10	0.18	0.07	0.11
Sum of CBCL	3.07	5.22b	0.83	3.79c	4.38	2.97	1.42
Group IQ Score	113	111	107	110	110	111	111
Achievement Test Scores							
Reading	67.0	62.6	70.7	64.0	57.0	56.9	59.3
Arithmetic	80.6	77.2	84.3	86.4	68.7	64.1	75.4
Estimated SES of Family	2.72	2.83	2.97	2.87	3.43	3.07	3.53
School Attendance	171	175	171	171	173	170	171
Coleman Item	0.62	0.54	0.18	0.19	0.14	0.38c	0.09

a=$p < .05$; b=$p < .01$; c=$p < .005$